

**REMARKS**

Claims 5-8 and 10 are pending in the Application. Claims 5-8 and 10 stand rejected.

Claims 5 and 8 are independent claims.

Claim 5 stands rejected under 35 U.S.C. §103(a) as allegedly being obvious over GB patent application publication Oh *et al.* (G.B. 2,314,077) (“Oh”), for which the U.S. patent 6,519,974 by Oh is referred in the present remark.

Claim 5 recites “**a preform cover** configured to seal one end of a holey optical fiber preform having a plurality of air holes disposed in a substantially vertical orientation; [and] **a gas supplier configured to supply gas into the air holes via the preform cover** to prevent the air holes from being distorted.”

Claim 5, as amended, simply changes the language of the claim; **no new feature has been added**. As such, the amendment **does not necessitate a new search**, and the Applicant respectfully requests entry of the amendment.

As noted in the claim, **the gas supplier and the preform cover** are configured to supply **gas into to air holes of the preform**.

To reject a claim under section 103, the United States Court of Appeals for the Federal Circuit, required a showing of an un rebutted prima facie case of obviousness (*In re Rouffet*, 149 F.3d 1350, 47 USPQ2d 1453 (Fed. Cir. 1998)). According to the United Court of Customs and Patent Appeals (the “CCPA”), the predecessor to the Federal Circuit, the *prima facie* case is not shown if the prior art references does not teach all features in the claims (*In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974); see also **MPEP 2143.03**), including those in **FUNCTIONAL LANGUAGE** (*In re Schreiber*, 128 F.3d 1473, 1478, 44 USPQ.2d 1429 (Fed. Cir. 1997)).

In judging whether all features are taught in the prior art references, “**ALL words** in a claim **must be considered**” (*In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970); MPEP 2143.03). A feature **cannot simply be ignored or disregarded** even if the feature is recited in functional language or even if the feature is indefinite (MPEP 2143.03 (requiring consideration of even indefinite features in determining patentability under 35 U.S.C. 103)). The act of ignoring or disregarding the feature is particularly **prohibited** if the feature is described in the form of “**configured to**” or “**adapted to**,” the forms that describe the feature structurally (see *In re Venezia*, 956 F.2d 956, 959, 189 USPQ 149, 152 (CCPA 1976) (holding that clause “a pair of sleeves... each sleeve *adapted to be fitted* over the insulating jacket” **imparts a structural feature** to the sleeve, rather than being a mere direction of activities to take place in the future)).

Moreover, the invention must be considered **as a whole** (*Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983)), whereas the prior art must be considered in its **entirety, including the portions that teaches away from the claimed invention** (*W. L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983); MPEP 2141.01(a)). If the prior art, in its entirety, teaches away from the claimed invention, as a whole, the invention is patentable over the prior art (*id.*).

In rejecting claim 5, the Office Action **assumes** the feature of “a gas supplier **for supplying gas into the air holes via the preform cover**” as being a recitation of an intended use, and **disregards the feature** from the consideration of patentability under 35 U.S.C. 103 (the present Office Action, page 5). After disregarding the feature, the Office Action indicates that Oh renders claim 5 obvious as the adjointer 47 and the nitrogen gas supply 48 of Oh teach the preform cover and the gas supplier of claim 5, respectively (*id.*, at page 5 and 2).

The Applicant believes that is improper to assume the of claims 5 as merely being a recitation of an intended use, without providing documentary evidence supporting the act of supplying of gas into the air holes of a preform or supporting the need to supply the gas into the air holes of a preform.

In addition, the Applicant respectfully submits that the claim 5, as amended, recite the gas supplier and the preform cover, structurally (see *In re Venezia*, 956 F.2d 956, 959, 189 USPQ 149, 152 (CCPA 1976)). As such, the feature of “gas supplier [being] configured to supply gas into the air holes via the preform cover” must be included in the consideration of patentability of claim 5. Considering such a feature and considering claim 5 as a whole, the Applicant respectfully submits that claim 5 is patentable over Oh.

Claim 5, as noted above, recites the gas supplier and the preform cover as being configured to supply gas into to air holes of the preform. Oh, on the contrary, discloses that the nitrogen gas supply 48 and the adjainer 47, two components which the Office Action equates with the gas supplier and the preform cover of claim 5, are configured to EVACUATE air contained in the space between the optical fiber preform 46 and the overcladding layer 44 (column 7, line 20-27; see also FIG. 5).

Therefore, Oh, at best, fails to teach an “a preform cover configured to seal one end of a holey optical fiber preform having a plurality of air holes disposed in a substantially vertical orientation; [and] a gas supplier configured to supply gas into the air holes via the preform cover to prevent the air holes from being distorted,” as recited in claim 5. At worst, Oh teaches away from the apparatus recited in claim 5.

In addition, the Applicant respectfully submits that each of the inlet tube A, outlet tube B, and suction tubes C, and channel 56 included in the adjainer 47 is separated or removed from the

optical fiber preform 46 (see FIG. 6B). As such, neither the gas input to the inlet tube A, traveling through channel 56, and output to outlet tube B, nor the gas being evacuated from the space between the preform 56 and the cladding 44 by the suction tubes C is flown into the preform. Moreover, neither gas is flown into the air holes inside the preform even if an optical preform having air holes replaces the optical fiber preform 56 of Oh.

The Applicant, therefore, respectfully submits that claim 5 is not obvious over Oh, and respectfully requests withdrawal of the rejection.

Claim 8 stands rejected under 35 U.S.C. §103(a) as allegedly being obvious over GB patent application publication Oh.

Claim 8 recites “a sealer configured to cover the top portion of the tubular preform and to receive a flow of gas at a predetermined pressure; [and] a storage configured to supply the gas to the air holes via the preform sealer to prevent the air holes from being distorted.” Claim 8, as amended, simply changes the language of the claim; no new feature has been added. As such, the amendment does not necessitate a new search, and the Applicant respectfully requests entry of the amendment.

The Applicant respectfully submits that the sealer and the storage of claim 8 are similar to the preform cover and the gas supplier of claim 5 and that the sealer and the storage are patentable over Oh on the same ground. As such, the Applicant respectfully requests withdrawal of the rejection on claim 8.

Other claims in this application are each dependent on the independent claims 5 and 8 and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual consideration of the patentability of each on its own merits is respectfully requested.

Amendment  
Serial No. 10/619,707

If any issues remain which may be best resolved through a telephone communication, the Examiner is requested to kindly telephone the undersigned telephone number listed below.

Respectfully submitted,



By: Steve Cha  
Attorney for Applicant  
Registration No. 44,069

Date

9/15/06

**Mail all correspondence to:**

Steve Cha, Registration No. 44,069  
Cha & Reiter  
210 Route 4 East, #103  
Paramus, NJ 07652  
Tel: 201-226-9245  
Fax: 201-226-9246

**Certificate of Mailing Under 37 CFR 1.8**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Mail Stop AF, Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on 9-15-06.

Steve Cha, Reg. No. 44,069  
(Name of Registered Rep.)

  
(Signature and Date)